| | Application No. | Applicant(s) |
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| Notice of Allowability | 10/621,328 | SONG, IN DUK |
| | Examiner | Art Unit |
| | Toan Ton | 2871 |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. This communication is responsive to | | |
| 2. The allowed claim(s) is/are 1-8. | | |
| 3. The drawings filed on 18 July 2003 are accepted by the Examiner. | | |
| 4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some* c) None of the: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 10/278931. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. | | |
| THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. | | |
| 6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. | | |
| Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date filed 07/18/03 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material | 6. ☐ Interview Summary Paper No./Mail Dat 8), 7. ☐ Examiner's Amendr | te |

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REASONS FOR ALLOWANCE

1. Claims 1-8 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art of record does not anticipate nor render obvious to one ordinary skilled in the art a method of manufacturing liquid crystal display device comprising a combination of various steps as claimed, more specifically, a combination of the followings: depositing an organic insulating material over the inorganic insulating material; removing selectively the organic insulating material at a partial area over the drain electrode, the gate pad and the data pad, to leave a portion of the organic insulating material over the gate pad and the data pad; patterning the gate insulating film and the inorganic insulating material using at least a portion of the remaining organic insulating material as a mask, thereby providing an inorganic protective film, an organic protective film, a drain contact hole, a gate contact hole and a data contact hole; and forming a pixel electrode on the inorganic protective film by depositing a transparent conductive film onto the inorganic protective film and the organic protective film and patterning the transparent conductive film, and forming a gate protective electrode and a data protective electrode on the inorganic protective film.

Kim (US 5883682) discloses a method of manufacturing liquid crystal display device comprising depositing insulating layers over TFT elements, remove selectively portions of the insulating layers thereby forming contact holes, depositing a pixel electrode over the insulating layers. However, Kim fails to disclose the above combination of the claimed invention, more particular, patterning the gate insulating film and the inorganic insulating material using at least

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a portion of the remaining organic insulating material as a mask, thereby providing an inorganic protective film, an organic protective film, a drain contact hole, a gate contact hole and a data contact hole

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

CONCLUSION

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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CONTACT INFORMATION

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan Ton whose telephone number is (571) 272-2303.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 17, 2004

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PRIMARY EXAMINER